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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/761,331 | 01/16/2001 | Hughes Roderick | D-2924 | 5991 |

33197 7590 05/15/2003

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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 05/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A9-10

Office Action Summary

| | | |
|-----------------|-----------------|--|
| Application No. | Applicant(s) | |
| 09/761,331 | RODERICK ET AL. | |
| Examiner | Art Unit | |
| Hai Vo | 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☒ This action is **FINAL**.
- 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-31 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-31 and 34-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493). Sandt discloses a hollow fence pole made of two concentric sleeves and separated by a space filled with a solid reactive resin reinforced with the fibers (figure 10, column 1, lines 51-54). Sandt discloses the sleeves made from polyvinyl chloride (column 4, lines 1-4). Sandt discloses the solid reactive resin being polyester, epoxy, phenolic or urea resin (column 4, lines 61-65). Sandt teaches the pole having a rectangular cross-section perpendicular to the length (column 3, lines 46-50). Sandt discloses the structural member being useful as a fence pole (column 1, lines 34-38). Sandt does not disclose the pole being a coextruded composite having a non-circular cross sectional area which is substantially uniform along its length. However, the limitations are merely related to the overall shape of the article. *In re Dailey*, 149 USPQ 47 (CCPA 1976), there is nothing on the record to show the particular shape of the pole is significant or is anything more than one of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of providing the shape of the pole, therefore, the shape of the pole in itself would not render the claims patentable over Sandt.

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3. Claims 11-14, 18-25, 34, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) as applied to claim 1 above, in view of Finley (US 6,054,207) substantially as set forth in Paper no. 7. With regard to newly added claims 36-42, Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt does not specifically disclose the core made of a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Finley teaches an unfoamed PVC wood fiber composite (column 11, lines 1-30). Finley also discloses a large variety of vinyl polymers used to form a composite material including PVC and ASA resins (column 5, line 45 et seq.). Likewise it is apparent that Finley discloses an unfoamed ASA wood fiber composite. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

4. Claims 11, 13, 14, 18-21, 23-25, 34, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) as applied to claim 1 above, in view of Deaner et al (US 5,486,553) or Hughes (US 6,133,349). Sandt teaches the sleeves made from polyvinyl chloride (column 4, lines 1-4). Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt

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does not specifically disclose the core comprising a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Deaner teaches a composite structural member comprising a blend of PVC, ASA and wood fibers (abstract, column 3, lines 40 et seq.). Hughes teaches a composite structural member comprising an ASA resin and wood fibers. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

5. Claims 11-14, 18-25, 34, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) as applied to claim 1 above, in view of Stucky et al (US 6,344,268) substantially as set forth in Paper no. 7. With regard to newly added claims 36-42, Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt does not specifically disclose the core made of a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Stucky teaches a cap stock comprising PVC, ASA and a wood fiber (column 3, lines 5-10, column 4, lines 17-30). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

6. Claims 26-31, 35, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) in view of Finley (US 6,054,207) and further in view of Kennedy et al (US 4,964,618) substantially as set forth in Paper no. 7. With regard to newly added claims 41 and 42, Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt does not specifically disclose the core made of a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Finley teaches an unfoamed PVC wood fiber composite (column 11, lines 1-30). Finley also discloses a large variety of vinyl polymers used to form a composite material including PVC and ASA resins (column 5, line 45 et seq.). Likewise it is apparent that Finley discloses an unfoamed ASA wood fiber composite. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

7. Claims 26-31, 35, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) in view of Stucky et al (US 6,344,268)

and further in view of Kennedy et al (US 4,964,618) substantially as set forth in Paper no. 7. With regard to newly added claims 41 and 42, Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt does not specifically disclose the core made of a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Stucky teaches a cap stock comprising PVC, ASA and a wood fiber (column 3, lines 5-10, column 4, lines 17-30). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

8. Claims 26-30, 35, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (US 5,858,493) in view of Deaner et al (US 5,486,553) or Hughes (US 6,133,349) and further in view of Kennedy et al (US 4,964,618). Sandt teaches the sleeves made from polyvinyl chloride (column 4, lines 1-4). Sandt discloses a core made of a thermoplastic polymer and reinforcing fibers. Sandt does not specifically disclose the core comprising a wood filled acrylonitrile/styrene/acrylic (ASA) polymeric material. Deaner teaches a composite structural member comprising a blend of PVC, ASA and wood fibers (abstract, column 3, lines 40 et seq.). Hughes teaches a composite structural

member comprising an ASA resin and wood fibers. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wood fiber as the reinforcing filler for the core of Sandt motivated by the desire to obtain a high strength composite that is easily manufactured. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include ASA resin into the core of Sandt motivated by the desire to provide substantial weatherability of the pole.

Response to Arguments

9. The 102/103 art rejections over Sandt have been overcome by the present amendment and response.
10. Applicant's arguments with respect to claims 1-10, and 15-16 have been considered but are moot in view of the new ground(s) of rejection.
11. The 103 art rejections have been maintained for the following reasons. The arguments that there is no motivation to replace a thermoplastic liquid in Sandt by a thermoplastic foam because a foamed material would complicate the objective of having the filaments run lengthwise along the pole is not found persuasive. Applicant needs to provide evidence or affidavit to support his statements. Further, the examiner maintains the combination of the cited references is sufficient and proper. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a wood fiber reinforced foam as the core of Sandt motivated by the desire to obtain a

composite that is thermally stable and has high modulus strength and adequate fastener retention (Finley, column 3, lines 5-10).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
May 9, 2003

A handwritten signature in black ink, appearing to read "Terrel Morris", with a stylized flourish at the end.

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700